



BUREAU OF AIR REGULATION



February 19, 1997

Mr. John C. Brown, Jr., P.E.
Administrator-Title V Section
Florida Department of Environmental Protection
111 South Magnolia Drive
Tallahassee, Florida 32301

Via FedEx (50) 1907 Airbill No. 2561490971

Re: Tampa Electric Company F. J. Gannon Station

File No. 0570040-002-AV

Response to Request for Additional Information Regarding Initial Title V Permit Application

Dear Mr. Brown:

Tampa Electric Company (TEC) received the Florida Department of Environmental Protection's (FDEP) request for additional information for our F. J. Gannon Station on November 22, 1996. In response to the referenced request for additional information, please find enclosed four (4) electronic copies of the updated ELSA files and one (1) hard copy of the application. Please be advised that the ELSA files are being submitted in the ELSA Version 1.2.1 to maintain consistency with the original ELSA submittal. The Responsible Official and Professional Engineer certifications are also enclosed using the new long-application form pages.

In addition, the following narrative to your specific information request is being provided to assist in the Title V application review:

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FDEP Ouestion 1:

Although your application states that No. 2 fuel oil is used for ignition during start-up for Solid Fuel-Fired Steam Generator Units Nos. 1 through 3, 5, and 6, the firing of No. 2 fuel oil is not addressed in the current air operation permits for these units. How long has TEC been using No. 2 fuel oil for startup in each unit, and what has been the maximum annual usage of No. 2 fuel oil in each unit? Please submit the Segment (Process/Fuel) Information for No. 2 fuel oil for these emission units as required by DEP Form No. 62-210.900(1) - Instructions (Enclosed).

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TEC Response:

Because the cited steam generators are solid fuel-fired, each of the units was designed and constructed for ignition using No. 2 fuel oil. This design has not been modified for any unit. No. 2 fuel oil continues to be used for ignition during start-up-for-the-cited steam generators. The application has been updated to include the requested Segment (Process/Fuel) Information form for each cited steam generator.

The No. 2 fuel oil injection guns used for boiler ignition are not equipped with flow meters. In the past, the No. 2 fuel oil usage reported on the F.J. Gannon Station Annual Operating Report has been determined from the facility's overall No. 2 oil usage (excluding the combustion turbine), divided equally among the 6 solid-fuel fired units. TEC will continue this method of reporting the amount of No. 2 fuel oil used for the solid-fuel fired units' startup operation.

FDEP Question 2:

On August 16, 1996, and September 17, 1996, inspections conducted by the Environmental Protection Commission of Hillsborough County (EPCHC) indicated fugitive emissions from Solid Fuel-Fired Steam Generator Unit No. 3. Please certify that the emissions unit is in compliance pursuant to Rule 62-296.320(4)(c), F.A.C. and specific condition number 2 of air operating permit AO 29255208 or submit a compliance plan pursuant to Rule 62-213.420(3)(j), F.A.C.

TEC Response:

Emissions Unit 3 is in compliance pursuant to Rule 62-296.320(4)(c), F.A.C., and Specific Condition 2 of air operating permit AO29-255208. F.J. Gannon Station has an established procedure of reasonable operating practices in place to identify and control unconfined particulate matter emissions from all steam generating units.

TEC personnel routinely inspect the all operating steam generating units. These inspections include detecting and evaluating fugitive emission leaks. Any problems identified are recorded and, if appropriate, a maintenance job request is generated for the next planned outage. Repairs may also be made during an unanticipated outage, time permitting.

It should be noted that during the August 1996 inspection, the Environmental Protection Commission of Hillsborough County (EPC) inspector was advised of this procedure, shown the inspection reports, and informed Gannon Unit 3 was scheduled for outage within the next 10 days. The EPC inspector appeared to be satisfied with TEC's operating practices at that time.

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During the September 17, 1996 inspection, Gannon 3 was offline for the above referenced scheduled outage. The fugitive emissions leaks were repaired during the outage.

FDEP Question 3:

In your application you indicate that there are no emission unit subjects to Standards of Performance for New Stationary Sources (NSPS). The coal yard appears to be subject to NSPS Subpart Y. Please explain why the coal yard is not subject to NSPS Subpart Y. If it is subject to the subpart, submit a compliance plan pursuant to Rule 62-213.420(3)(j), F.A.C., or indicate your response that you are in compliance with Subpart Y.

TEC Response:

As you may be aware, the Gannon Station was originally constructed to utilize coal as as a primary fuel well before the promulgation of any standards of performance for new sources. Four of the units were converted to oil-firing and were subsequently converted back to coal. At the time of reconversion to coal, the units were subject to a proposed prohibition order that was issued by United States Department of Energy, Economic Regulatory Administration. The effect of the order would have been to require that the units be reconverted to coal-firing. When the reconversion was proposed, both the Department of Environmental Regulation and the United States Environmental Protection Agency were consulted concerning regulatory requirements. Both agencies approved the reconversion and determined that the Gannon Station was not subject to NSPS. There have been no changes at the facility that would alter this conclusion.

FDEP Question 4:

40 CFR 63, Subpart T, "National Emission Standards for Hazardous Air Pollutants (NESHAP), applies if you own or operate a solvent cleaning machine that uses a solvent that contains 5 percent or more by weight of any one of any combination of the following halogenated solvents: Carbon tetrachloride, Chloroform, Perchloroethylene, 1,1,1-Trichloroethane, Trichlorethylene, Methylene chloride. a) Are any of the six solvents being used at this facility? b) If yes, what is the amount of solvent (in gallons) used annually at parts-cleaning and degreasing stations? c) Are buckets, pails, and beakers with capacities greater than 7.6 liters (2 gallons) being used?

TEC Response:

No solvent cleaning machines using the cited solvents are in use at F.J. Gannon Station.

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FDEP Ouestion 5:

What is being stored in the inorganic storage tanks with storage capacities greater than 550 gallons?

TEC Response:

Six storage tanks with storage capacities greater than 550 gallons (gal) are in use at F.J. Gannon Station. These tanks, the storage capacity, and the material stored are listed below.

Storage Tank 1 - Sodium hydroxide (NaOH) - 8,073 gal Storage Tank 2 - Sodium hydroxide (NaOH) - 7,520 gal Storage Tank 3 - Sulfuric acid (H_2SO_4) - 7,500 gal Storage Tank 4 - Sulfuric acid (H_2SO_4) - 7,500 gal Storage Tank 5 - Sulfuric acid (H_2SO_4) - 1,146 gal Storage Tank 6 - Sodium bisulfite (Na_2SO_3) - 8,500 gal Storage Tank 7 - Molten sulfur - 4,000 gal

FDEP Ouestion 6:

Since the Gannon Station is located in a "maintenance area" for ozone, does the vehicle refueling operation dispense more than 20,000 gallons/month gasoline? If so, Stage I vapor control applies.

TEC Response:

The F.J. Gannon Station vehicle refueling operation does not dispense more than 20,000 gallons/month gasoline.

FDEP Ouestion 7:

The EPCHC has reported to the Department that TEC is currently adding ammonia and sulfur trioxide (SO₃) to flue gases. The SO₃ is being generated from molten sulfur. These processes are not addressed in any of the current air operation permits. How have these additives been addressed in quantifying emissions from these regulated emission units? We need to better understand the potential for additional emissions from transportation, storage, handling, and combustion of these additives.

TEC Response:

Ammonia is not added to the flue gases at F.J. Gannon Station.

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Sulfur trioxide (SO_3) is added to the F.J. Gannon Station Unit 6 flue gas prior to the electrostatic precipitator (ESP). The SO_3 serves as a flue gas conditioner to enhance ESP performance. This SO_3 is emitted from the Unit 6 stack as part of the combustion exhaust stream. The Pollutant Information section (Section E) for Emission Unit 6 does include sulfuric acid mist (SAM). The small amount of flue gas conditioning SAM was included with the fuel-generated SAM for the Title V operating permit application.

 SO_3 is generated from molten sulfur and is only released into the Unit 6 flue. SO_3 is not used for any other purpose and is not released to the atmosphere from any other location at F.J. Gannon Station.

Other Updates

A newly signed Responsible Official Certification Statement is included in the update package. Please note that the Responsible Official is now Douglas H. Finke. A newly signed Professional Engineer (P.E.) Certification Statement is also included in the update package. The phone and fax numbers for the Responsible Official (Doug Finke), the plant contact (Cindy Barringer) and the application contact (Janice Taylor) have been updated along with my mailing address in this revised permit application. The Emission Point (Stack/Vent) Information (Section E) sheet for Emission Unit 5 has been amended to correct the actual volumetric flow rate (738,606 acfm).

Please telephone me at (813) 641-5039 if you have any questions or require any clarification.

Sincerely,

Janice K. Taylor Senior Engineer

Environmental Planning

EP\gm\JKT784

Enclosures

c: Mr. Jerry Kissell, DEP - SW District Mr. Richard Kirby, EPCHC